

RECEIVED **CENTRAL FAX CENTER** OCT 1 9 2004

United States 82269-2 **Patents**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION

Serial Number:

09/465,705

Group Art Unit:

2662

Examiner:

David E. Odland

Title:

METHOD AND APPARATUS FOR ADJUSTING PACKET TRANSMISSION VOLUME FROM A

SOURCE

Filing Date:

December 17, 1999

Inventors: Agent's ref: James Aweya; Delfin Y. Montuno; Michel Ouellette

82269-2

July 5, 2004

U.S. Commissioner of Patents and Trademarks

U.S. Patent and Trademark Office

Washington, D.C. 20231

United States

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

This Information Disclosure Statement is being filed to satisfy the duty under 37 CFR 1.56 to disclose to the Office information, known to individuals associated with the filing and prosecution of the subject application, which may be material to the examination of the application.

A list of all patents, publications or other information submitted for consideration by the Office is hereby provided by way of the enclosed four (4) sheets of Form PTO/SB/08. Also enclosed are copies of references listed on the Form.

This statement is not to be construed as a representation that a search has been made or an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 CFR 1.56(b).

It is respectfully requested that the information be expressly considered by the Examiner and that the references be made of record and appear among the "References Cited" on any patent to issue therefrom.

Applicant has not received a first Office action after filing a request for continued examination under 37 C.F.R. § 1.114, and therefore believes that no fee is required to file this statement. However, the Patent Office is hereby authorized to charge any fee, any fee deficiency, or credit any overpayment in fees, to our Deposit Account Number 06-0713.

Respectfully submitted,

John W. Knox, Reg. No. 35,776 SMART & BIGGAR Box 11560 Vancouver Centre 2200 – 650 West Georgia Street Vancouver, British Columbia Canada V6B 4N8 Telephone: 604-682-7295

JWK:cmm
Encl.: Form PTO/SB/08
Copies of References Listed

RECEIVED -> CENTRAL FAX CENTER

OCT 1 9 2004

PTQ/\$B/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO Complete if Known **Application Number** 09/465,705 INFORMATION DISCLOSURE Filing Date December 17, 1999 STATEMENT BY APPLICANT First Named Inventor James Aweya Art Unit 2662 (use as many sheets as necessary) **Examiner Name** of 4 82269-2 Sheet 1 Attorney Docket Number

			U.S. PATENT D	OCUMENTS		
		Document Number		Name of Patentee or	A-1 (!)141	
Examinor	Cite No.	Number - Kind Code ² (# knawn)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Pagos, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	A1	US 6,463,068 B1	10/08/2002	Lin et al.		
	A2	US 6,333,917 B1	12/25/2001	Lyon et al.		
	A11	US 6,011,795	01/04/2000	Varghese et al.		
-	A12	US 5,781,772	07/14/1998	Wilkinson, III et al.		
	A13	US 6,067,574	05/23/2000	Tzeng		
	A14	US 6,018,524	01/25/2000	Turner et al.		
	A15	US 6,212,184 B1	04/03/2001	Venkatachary et al.		
	A16	US 6,266,706 B1	07/24/2001	Brodnik et al.		
	A17	US 6,223, 172 B1	04/24/2001	Hunter et al.		
	A18	US 6,614,789 B1	09/02/2003	Yazdani et af.		
	A19	US 6,560,610 B1	05/06/2003	Eatherton et al.		
	A20	US 6,526,055 B1	02/25/2003	Periman et al.		
	A21	US 6,529,477	03/04/2003	Toporek et al.		
	A22	US 6,424,626	07/23/2002	Kidambi et al.		
	A23	US 6,252,851	06/26/2001	Siu et al.		
	A24	US 6,215,769	04/10/2001	Ghani et al.		
	A25	US 5,541,919	07/30/1996	Yong et al.		
	A26	US 6,671,258	12/30/2003	Bonneau		
· · · · · ·	A27	US 6,490,251 B2	12/03/2002	Yin et al.	·	
	A28	US 6,119,235	09/12/2000	Vaid et al.		
	A29	US 6,108,307	08/22/2000	McConnell et al.		
	A30	US 4,769, 815	09/06/1988	Hinch et al.		
	 					
	<u> </u>					
	<u></u>	<u> </u>				
			<u> </u>			

and the same of th			
Examiner Signature		Date Considered	
	The state of the s		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: TUnsaved Document 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents,

¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as Indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08B (10-01) -

Approved for use through 10/31/2002, OMB 0651-0051
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no porsons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO Complete if Known Application Number 09/465,705 **INFORMATION DISCLOSURE** Filing Date December 17, 1999 STATEMENT BY APPLICANT First Named Inventor James Aweya Art Unit 2662 (use as many sheets as necessary) Examiner Name Sheet of 4 Attorney Docket Number 82269-2

	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2		
*	G1	OTT, Teunis J.; LAKSHMAN, T.V.; WONG, Larry H.; "SRED: Stabilized RED", INFOCOMM '99, Eighteenth Annual Joint Conference of the IEEE Computer and Communications Societies Proceedings, IEEE, June 1999, Volume 3, Pages 1346-1355			
0 .	C2	FENG, Wu-Chang; KANDLUR, Dilip D.: SAHA, Debanjan; SHIN, Kang G.; "BLUE: A New Class of Active Queue Management Algorithms", U. Michigan CSE-TR-387-99, April 1999			
	C3	FENG, Wu-Chang; KANDLUR, Dilip D.; SAHA, Debanjan; SHIN, Kang G.; "Techniques for Eliminating Packet Loss in Congested TCP/IP Networks", U. Michigan CSE-TR-349-97, November 1997			
	C22	SRINIVASAN, V.; VARGHESE, G.; "Faster IP Lookups using Controlled Prefix Expansion", ACM Transactions on Computer Systems, pp. 1-10, June 1998			
10 *	C23	EATHERTON, William N., "ASIC Based IPV4 Lookups", Washington University, Applied Research Laboratory, pp. 1-22, June 23, 1998			
	G24	EATHERTON, William N.; "Hardware-Based Internet Protocol Prefix Lookups", Thesis, Washington University, pp. 1-100, May 1999			
	C25	SRINIVASAN, V.; VARGHESE, G.: "Fast Address Lookups Using Controlled Prefix Expansion", ACM Transactions on Computer Systems, Vol. 17, No. 1, pp. 1-40, February 1999			
	C28	FILIPPI, E.; INNOCENTI, V.; VERCELLONE, V.; "Address Lookup Solutions for Gigabit Switch/Router", Globecom '98, Sydney, Australia, November 1998			
	C27	DEGERMARK, Mikael; BRODNIK, Andrej; CARLSSON, Svante; PINK, Stephen; "Small Forwarding Tables for Fast Routing Lookups", Proc. of ACM SIGCOMM, pp. 3-14, September 1997			
	C28	DOERINGER, Willibald; KARJOTH, Gunter; NASSEHI, Medhi; "Routing on Longest-Matching Prefixes", IEEE/ACM Trans. On Networking, Vol. 4, No. 1, pp. 86-97, February 1996			
	C29	TZENG, Henry Hong-Yi; PRZYGIENDA, Tony; "On Fast Address-Lookup Algorithms"; pp. 1067-1082, IEEE Journal On Selected Areas in Communications, Vol. 17, No. 6, June 1999			
,	C30	TZENG, Henry Hong-Yi; "Longest Prefix Search Using Compressed Trees", Globecom '98, Sydney, Australia, November 1998			
	C31	KUMAR, Vijay P.; LAKSHMAN, T.V.; STILIADIS, Dimitrios; "Beyond Best Effort: Router Architectures for the Differentiated Services of Tomorrow's Internet, IEEE Communications Magazine, pp. 152-164, May 1998	-		

	·	<u> </u>	<u> </u>
Examiner	•	Date	
Signature			
Signature		Considered	
			•

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Patents, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Unsaved Document

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08B (10-01)
Approved for use through 10/31/2002. OMB 0861-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Under the Paperwork Reduced.		Complete if Known
Substitute for form 14498/PTO	Application Number	09/465,705
INFORMATION DISCLOSURE	Filing Date	December 17, 1999
STATEMENT BY APPLICANT	First Named Inventor	James Aweya
SINIEMENT DI AL MOTOR	Art Unit	2662
choote as necessary)	Examiner Name	
(use as many sheets as necessary)	Attorney Docket Number	82269-2
Sheet 3 01 4		

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue	T²
nitials *	No.1	GUPTA, Pankaj; LIN, Steven; McKEOWN, Nick; "Routing Lookups in Hardware at Memory Accessing Line (NECOM), April 1998	
	C33	NILSSON, Stefan; KARLSSON, Gunnar; "Fast Address Lookup for Internet Routers", IFIP Workshop on Broadband Communications, pp. 10-22, April 1998	
	C34	WALDVOGEL, Marcel; VARGHESE, George; TURNER, Jon; PLATTNER, Bernhard; "Scalable High Speed IP Routing Lookups", Proc. Of ACM SIGCOM, September 1997	
	C35	LAMPSON, B.; SRINIVASAN, V.; VARGHESE, G.; "IP Lookups Using Multiway and Multicolumn	
	C38	ZITTERBART, M.; HARBAUM, T.; MEIER, D.; BROKELMANN, D.; "HeaRT: High Performance Routing Table Look Up", IEEE Workshop Architecture & Implementation of High Performance Routing Table Look Up", IEEE Workshop Architecture & Implementation of High Performance Routing Table Look Up", IEEE Workshop Architecture & Implementation of High Performance	_
	C37	FULLER, V.; LI, T.; YU, J.; VARADHAN, K.; "Classless Inter-Domain Routing (Clork). Experiment and Aggregation Strategy", RFC 1519, Internet Engineering Task Force, September 1993	
	C38	PEI, Tong Bi: ZUKOWKSI, Charles; "Putting Routing Tables in Silicon", IEEE Network Magazine, pp.	_
	C39	MORRISON, Donald R.; "PATRICIA - Practical Algorithm To Retrieve Information Couled Internation Couled Int	igg
	C41	October 1968 GHANI, Nasir: "Enhanced TCP/IP ACK Pacing for High Speed Networks", Proc. 16th Int'l Teletraffic Congress, Edinburgh, Scotland, June, 1999	-
	G42	MA, Jian; "Improving TCP Performance in IP networks with Wireless links", IEEE, ICPWC '99, Jaipur,	-
	C43	NARVAEZ, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; SIU, Kai-Yeung; "Acknowledgement bucket scheme for regulating to the Narvaez, Paolo; "Acknowledgement bucket scheme for regulating to the Narvaez, "Acknowledgement bucket scheme for regulating to the Narvaez, "Acknowledgement bucket scheme for regulation to the Narvaez, "Acknowledgement bucket scheme for	1
-	C44		1
-	C45	KIOKE, Arata: "TCP Flow control with ACR information", ATM Forum Contribution 97-0758R1,	

_		_	•		
				Date	
1	Examiner	1		Considered	
	Signature				eng. Draw line through citation if not in conformance

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional), 2 Applicant is to place a check mark here if English tanguage Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Comments. DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Unsaved Document

Approved for use through 10/31/2002, OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1996, no persons are required to respond to a collection of information unless it contains a valid CMB control number

Substitute for form 1449B/PTO Complete If Known Application Number 09/465,705 INFORMATION DISCLOSURE Filing Date December 17, 1999 STATEMENT BY APPLICANT First Named Inventor James Aweya Art Unit (use as many sheets as necessary) Examiner Name Sheet of | 4 Attorney Docket Number 82269-2

	,	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т
	C46	STEVENS, W.; Memo (IETF RFC 2001): "TCP Slow Start, Congestion Avoidance, Fast Retransmit, and Fast Recovery Algorithms", January, 1997	
	C47	KARN, P.; "Dropping TCP acks", Mail to the end-to-end mailing list, February, 1998	
	C48	ASTROM, K.; HAGGLUND T.; "PID Controllers: Theory, Design and Tuning", Instrument Society of America, 1995, pp. v, 80-81	
	C48	RAMAKRISHNA, M.V.; FU, E.; BAHCEKAPILI, E.; "Efficient Hardware Hashing Functions for High Performance Computers", pp. 1378-1381; IEEE Transactions on Computers, Vol. 46, No. 12, December 1997	
	C50	JAIN, Raj; "A Comparison of Hashing Schemes for Address Lookup in Computer Networks"; pp. 1-17; Technical Report DEC-TR-693 Digital Equipment Corporation, February 1989	
	C51	McKENNEY, Paul E.; "High-Speed Event Counting and Classification Using a Dictionary Hesh Technique", pp. III-71 - III-75; International Conference on Parallel Processing, 1989	
	C52	CARTER, Larry; FLOYD, Robert; GILL, John; MARKOWSKY, George; WEGMAN, Mark; "Exact and Approximate Membership Testers"; Proc. 10th Annual ACM Symposium on Theory of Computing, pp. 59-65, May 1978	

Examiner Signature		Date	
O.g.i.d.a.ç	<u> </u>	Considered	

EXAMINER: Initial If reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

^{*} Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case, Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Unsaved Document